

Application No. 09/943,004
Response to Final Office Action of January 10, 2006

Patent
Attorney Docket No. 86655-1

I. REMARKS / ARGUMENTS

The application still contains forty-two (42) claims, numbered 1 to 42.

No amendments have been made to the present patent application by way of the present response.

a) Rejection of claims 1 to 5 and 26 to 42 under 35 USC 102

On page 3 of the Final Office Action, the Examiner has rejected claims 1 to 5 and 26 to 42 under 35 USC 102(e) as being anticipated by U.S. Patent 6,728,211 to Peris *et al.* (hereinafter referred to as "Peris").

As discussed during the telephonic Examiner Interview and as described below, the Applicants respectfully traverse this rejection and submit that claims 1 to 5 and 26 to 42 are in condition for allowance.

Independent claim 1

The Examiner's attention is respectfully directed to the following reproduction of claim 1, portions of which have been emphasized:

A method of regulating packet flow to a downstream entity capable of forwarding packets to a plurality of intermediate destinations, the method comprising:

maintaining a database of queues, each queue in the database being associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of the intermediate destinations, each queue in the database being further associated with a state that is either active or inactive;

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upon receipt of a message from the downstream entity indicating a reduced ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, rendering inactive the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination; and

upon receipt of a message from the downstream entity indicating an increased ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, rendering active the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination.

It is respectfully submitted that Peris does not disclose or suggest the above-emphasized features of claim 1.

Firstly, as discussed during the telephonic Examiner Interview, and as acknowledged by the Examiner in the Interview Summary of June 7, 2006, Peris does not disclose or suggest maintaining a database of queues where each queue is associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of a plurality of intermediate destinations. Specifically, there is nothing in Peris that teaches or suggests an association between a queue and packets intended to be forwarded to a given final destination via a given intermediate destination. Rather, Peris solely describes associating a queue with packets to be sent to a given destination, not with packets to be sent to a given destination via a given intermediate destination (col. 4, lines 43 to 45).

Secondly, since Peris does not disclose queues associated with packets to be forwarded to a particular final destination via a particular intermediate destination, Peris cannot possibly be held to teach or suggest altering the state of such queues which are not even disclosed. Therefore, Peris cannot be held to disclose or suggest rendering inactive or

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active the state of a queue associated with packets intended to be forwarded to a particular final destination via a particular intermediate destination in response to receipt of a message indicating a reduced or increased ability of the particular intermediate destination to accept packets intended to be forwarded to the particular final destination.

In light of the above, the Applicants respectfully submit that Peris does not disclose or suggest at least one feature of claim 1. Therefore, it is respectfully submitted that Peris does not anticipate claim 1. The Examiner is thus respectfully requested to withdraw the rejection of claim 1, which is believed to be in condition for allowance.

Dependent claims 2 to 5 and 26 to 30

Claims 2 to 5 and 26 to 30 depend on claim 1 and therefore incorporate by reference all the features of claim 1, including those already shown to be absent from Peris. Therefore, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that claims 2 to 5 and 26 to 30 are in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of these claims.

Independent claim 31

The Examiner's attention is respectfully directed to the following reproduction of claim 31, portions of which have been emphasized:

A congestion manager for regulating packet flow to a downstream entity capable of forwarding packets to a plurality of intermediate destinations, comprising:

means for maintaining a database of queues, each queue in the database being associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of the intermediate destinations, each queue in the database being further associated with a state that is either active or inactive;

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means for rendering inactive, upon receipt of a message from the downstream entity indicating a reduced ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination; and

means for rendering active, upon receipt of a message from the downstream entity indicating an increased ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination.

The Examiner will appreciate that the above-emphasized features of claim 31 are similar to features of claim 1 already shown in respect of claim 1 to be neither taught nor suggested by Peris.

Therefore, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that at least one feature of claim 31 is not taught or suggested by Peris and thus that claim 31 is not anticipated by Peris. Accordingly, it is respectfully submitted that claim 31 is in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of this claim.

Independent claim 32

The Examiner's attention is respectfully directed to the following reproduction of claim 32, portions of which have been emphasized:

A computer-readable storage medium containing a program element for execution by a computing device to implement a congestion manager for

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regulating packet flow to a downstream entity capable of forwarding packets to a plurality of intermediate destinations, the program element including:

program code means for maintaining a database of queues, each queue in the database being associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of the intermediate destinations, each queue in the database being further associated with a state that is either active or inactive;

program code means for rendering inactive, upon receipt of a message from the downstream entity indicating a reduced ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination; and

program code means for rendering active, upon receipt of a message from the downstream entity indicating an increased ability of a particular one of the intermediate destinations to accept packets intended to be forwarded to a particular one of the final destinations, the state of the queue associated with packets intended to be forwarded to the particular final destination via the particular intermediate destination.

The Examiner will appreciate that the above-emphasized features of claim 32 are similar to features of claim 1 already shown in respect of claim 1 to be neither taught nor suggested by Peris.

Therefore, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that at least one feature of claim 32 is not taught or suggested by Peris and thus that claim 32 is not anticipated by Peris. Accordingly, it is respectfully submitted that claim 32 is in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of this claim.

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Independent claim 33

The Examiner's attention is respectfully directed to the following reproduction of claim 33, portions of which have been emphasized:

A congestion manager capable of forwarding packets to a plurality of intermediate destinations, comprising:

a queue processor for maintaining information on a plurality of queues, each queue being associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of the intermediate destinations; and

a controller in communication with the queue processor;
said controller being adapted to maintain information on a state of each queue, the state of a queue being either active or inactive;

said controller being further adapted to respond to a message from a particular one of the intermediate destinations indicative of a reduced ability of the particular intermediate destination to accept packets intended to be forwarded to a particular one of the final destinations by rendering inactive the state of the queue associated with packets intended to be forwarded to a particular one of the final destinations via the particular intermediate destination; and

said controller being further adapted to respond to a message from a particular one of the intermediate destinations indicative of an increased ability of the particular intermediate destination to accept packets intended to be forwarded to a particular one of the final destinations by rendering active the state of the queue associated with packets intended to be forwarded to a particular one of the final destinations via the particular intermediate destination.

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The Examiner will appreciate that the above-emphasized features of claim 33 are similar to features of claim 1 already shown in respect of claim 1 to be neither taught nor suggested by Peris.

Therefore, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that at least one feature of claim 33 is not taught or suggested by Peris and thus that claim 33 is not anticipated by Peris. Accordingly, it is respectfully submitted that claim 33 is in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of this claim.

Dependent claims 34 to 37

Claims 34 to 37 depend on claim 33 and therefore incorporate by reference all the features of claim 33, including those already shown to be absent from Peris. Therefore, for the same reasons as those set forth above in respect of claim 33, it is respectfully submitted that claims 34 to 37 are in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of these claims.

Independent claim 38

The Examiner's attention is respectfully directed to the following reproduction of claim 38, portions of which have been emphasized:

A method of regulating packet flow to a downstream entity capable of forwarding packets to a plurality of intermediate destinations, the method comprising:

maintaining a databasc of queues, each queue in the database being associated with packets of a corresponding one of a plurality of service classes intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of the intermediate destinations, each

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queue in the database being further associated with a state that is either active or inactive;

upon receipt of a message from the downstream entity indicating a reduced ability of a particular one of the intermediate destinations to accept packets of a particular one of the service classes intended to be forwarded to a particular one of the final destinations, rendering inactive the state of the queue associated with packets of the particular service class intended to be forwarded to the particular final destination via the particular intermediate destination; and

upon receipt of a message from the downstream entity indicating an increased ability of a particular one of the intermediate destinations to accept packets of a particular one of the service classes intended to be forwarded to a particular one of the final destinations, rendering active the state of the queue associated with packets of the particular service class intended to be forwarded to the particular final destination via the particular intermediate destination.

The Examiner will appreciate that the above-emphasized features of claim 38 are similar to features of claim 1 already shown in respect of claim 1 to be neither taught nor suggested by Peris.

Therefore, for the same reasons as those set forth above in respect of claim 1, it is respectfully submitted that at least one feature of claim 38 is not taught or suggested by Peris and thus that claim 38 is not anticipated by Peris. Accordingly, it is respectfully submitted that claim 38 is in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of this claim.

Dependent claims 39 to 42

Claims 39 to 42 depend on claim 38 and therefore incorporate by reference all the features of claim 38, including those already shown to be absent from Peris. Therefore,

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for the same reasons as those set forth above in respect of claim 38, it is respectfully submitted that claims 39 to 42 are in condition for allowance and the Examiner is respectfully requested to withdraw the rejection of these claims.

b) Rejection of claims 6 to 25 under 35 USC 103

On page 13 of the Final Office Action, the Examiner has rejected claims 6 to 25 under 35 USC 103(a) as being unpatentable over U.S. Patent 6,728,211 to Peris *et al.* (hereinafter referred to as "Peris") in view of U.S. Patent 6,856,595 to Brown (hereinafter referred to as "Brown").

The Applicants respectfully traverse this rejection and submit that claims 6 to 25 are in condition for allowance.

Dependent claims 6 to 25

Firstly, claims 6 to 25 depend on claim 1 and therefore incorporate by reference all the features of claim 1, including those already shown in respect of claim 1 to be absent from Peris, namely:

- maintaining a database of queues where each queue is associated with packets intended to be forwarded to a corresponding one of a plurality of final destinations via a corresponding one of a plurality of intermediate destinations; and
- rendering inactive or active the state of a queue associated with packets intended to be forwarded to a particular final destination via a particular intermediate destination in response to receipt of a message indicating a reduced or increased ability of the particular intermediate destination to accept packets intended to be forwarded to the particular final destination.

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Secondly, it is respectfully submitted that Brown also does not teach or suggest these features of claim 1 that have been shown to be absent from Peris.

Accordingly, the Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness since Peris and Brown, taken alone or in combination, teach or suggest all of the claim features¹. The Examiner is thus respectfully requested to withdraw the rejection of claims 6 to 25, which are believed to be in condition for allowance.

¹ For the Examiner to establish a *prima facie* case of obviousness, three criteria must be considered: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references must teach or suggest all of the claim limitations. MPEP §§ 706.02(j), 2142 (8th ed.).

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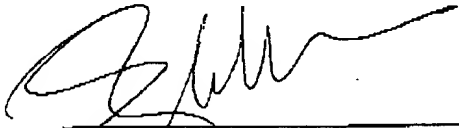
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II. CONCLUSION

In view of the foregoing, and further to the telephonic Examiner Interview, the Applicants are of the view that claims 1 to 42 are in condition for allowance. Favourable reconsideration is requested. Early allowance of the application is expected.

If the application is not considered to be in full condition for allowance, for any reason, the Applicants respectfully request the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,



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